

Title (en)
POLYKETONE POWDER FOR LASER SINTERING

Title (de)
POLYKETONPULVER FÜR DAS LASERSINTERN

Title (fr)
POUDRE DE POLYCÉTONE POUR FRITTAGE LASER

Publication
EP 4305090 B1 20240703 (EN)

Application
EP 22735045 A 20220516

Priority
• US 202163189609 P 20210517
• US 202163217451 P 20210701
• US 2022029424 W 20220516

Abstract (en)
[origin: US2022363826A1] A semicrystalline polyketone powder useful for additive manufacturing may be made by dissolving a polyketone having differential scanning calorimetry (DSC) monomodal melt peak, at a temperature above 50° C. to below the melt temperature of the polyketone, precipitating the dissolved polyketone by cooling, addition of a nonsolvent or combination thereof. The method may be used to form polyketones having a DSC melt peak with an enthalpy greater than the starting polyketone.

IPC 8 full level
C08J 3/14 (2006.01); **B29B 13/02** (2006.01); **B29B 13/10** (2006.01); **B33Y 70/00** (2020.01)

CPC (source: EP IL KR US)
B29B 9/02 (2013.01 - IL KR US); **B29B 13/02** (2013.01 - EP IL KR); **B29B 13/10** (2013.01 - EP IL KR); **B29C 64/153** (2017.08 - KR); **B29C 64/314** (2017.08 - IL KR US); **B33Y 40/10** (2020.01 - IL KR US); **B33Y 70/00** (2014.12 - EP IL KR US); **C08G 67/02** (2013.01 - IL US); **C08J 3/14** (2013.01 - EP IL KR US); **C08J 9/0004** (2013.01 - IL US); **C08J 9/122** (2013.01 - EP IL KR); **C08J 9/28** (2013.01 - EP IL KR); **C08J 9/36** (2013.01 - EP IL KR US); **C09D 5/031** (2013.01 - IL US); **C09D 173/00** (2013.01 - IL US); **B29K 2061/00** (2013.01 - IL KR US); **B29K 2995/004** (2013.01 - IL KR US); **C08G 2150/20** (2013.01 - IL US); **C08J 2201/054** (2013.01 - EP IL KR US); **C08J 2203/06** (2013.01 - EP IL KR); **C08J 2203/08** (2013.01 - EP IL KR); **C08J 2300/22** (2013.01 - EP IL KR); **C08J 2361/02** (2013.01 - IL US); **C08J 2373/00** (2013.01 - EP IL KR US)

Citation (examination)
SHEN J ET AL: "Preparing polyaryletherketone powder by adding polyaryletherketone raw materials and organic solvents, heating, heat-preserving to dissolve polyaryletherketone raw materials, cooling for precipitation, washing precipitate and drying", WPI / 2017 CLARIVATE ANALYTICS., vol. 2020, no. 12, 7 January 2020 (2020-01-07), XP002807368

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US 2022363826 A1 20221117; EP 4305090 A1 20240117; EP 4305090 B1 20240703; EP 4313532 A1 20240207; EP 4313532 B1 20241016; EP 4337441 A1 20240320; IL 308357 A 20240101; IL 308358 A 20240101; IL 308359 A 20240101; JP 2024518259 A 20240501; JP 2024519655 A 20240521; JP 2024519663 A 20240521; KR 102685832 B1 20240716; KR 102698624 B1 20240826; KR 20230148256 A 20231024; KR 20230150373 A 20231030; KR 20230151539 A 20231101; US 11845833 B2 20231219; US 2022363825 A1 20221117; US 2022380565 A1 20221201; US 2024247103 A1 20240725; US 2024270905 A1 20240815; WO 2022245720 A1 20221124; WO 2022245721 A1 20221124; WO 2022245722 A1 20221124

DOCDB simple family (application)
US 202217745274 A 20220516; EP 22728722 A 20220516; EP 22733780 A 20220516; EP 22735045 A 20220516; IL 30835723 A 20231107; IL 30835823 A 20231107; IL 30835923 A 20231107; JP 2023559758 A 20220516; JP 2023561020 A 20220516; JP 2023561767 A 20220516; KR 20237033229 A 20220516; KR 20237033236 A 20220516; KR 20237033244 A 20220516; US 2022029420 W 20220516; US 2022029422 W 20220516; US 2022029424 W 20220516; US 202217745169 A 20220516; US 202217745219 A 20220516; US 202218289857 A 20220516; US 202218289865 A 20220516